orrhages which take place during the act of labor. Two hundred spinal cords of embryos, infants and children in the first two years of life form the material upon which the study is based. The cords were stained chiefly by the Marchi method and by Nissl, Weigert, etc. The changes found could be divided into two classes: First, intrapartum spinal cord hemorrhages; second, anomalies of the central canal and its vicinity. The results of the study of this material are as follows: One case of intrapartum spinal cord hemorrhage, the location of which was charasteristic of the location of the lesions in syringomyelia. Quite frequently an enlargement of the central canal was found. In one cord from a child nineteen months old, in addition to the enlarged central canal, was a glia overgrowth. In the cord of an ánacephalous monster, anomalies of the central canal, as well as other pathological cord appearances, could be demonstrated.

SCHWAB.

NEPHROLITHIASIS AND SPINAL CORD DISEASES. Schlesinger (Wiener klin. Rund. No. 41, p. 769, 1901).

Recently the relation of stone in the kidney and diseases of the spinal cord have attracted considerable attention. The hypothesis has been advanced that in some cases spinal cord affections cause the formation of a kidney stone. The statistics of Maschka in this respect are of interest: In 78 cases of nephrolithiasis, he found spinal cord lesions in three. These statistics of Maschka are based upon 15,000 autopsies. In three cases of syringomyelia, Schlesinger found kidney calculus. In two of these, the stones were phosphates, and in the third, urates. Two had cystitis and pyelitis, and the third was free from kidney complications. In another case of encephalomyelitis a kidney calculus was found. From a consideration of these cases, as well as from those found in literature, the author comes to the following conclusions: Kidney calculi are found relativelv frequently in traumatic spinal cord affections, and in syringomyelia, much less often in spinal cord tumors. Symptoms of nephrolithiasis follow those of the spinal cord lesions months and years afterwards. Kidney calculi, found in spinal cord affections, are mostly phosphates, much more rarely urates. Cysto-pyelitis can be absent in spite of the kidney stone and spinal cord affection, but is present most frequently in phosphatic stone. The spinal cord affection appears to act favorably upon the formation of a calculus, either directly or indirectly. Perhaps a certain predisposition, especially in the case of uratic calculi, is essential. SCHWAB.

THE PATHOLOGY AND TREATMENT OF RHEUMATOID ARTHRITIS. P. W. Latham (The Lancet, Vol. clx., 1901, p. 998).

The aim of this interesting contribution is to uphold the dystropic or neural theory of rheumatoid arthritis. The author feels that although it is said to be without the support of definite evidence of morbid change in the spinal nerve cells or in the nerves of the joint, he believes this criticism to be based on insufficient pathological observation and feels that both clinically and therapeutically he has found cordial support for the dystrophic hypothesis. As regards the clinical side of his argument he points to the distinctly neurotic character of the antecedents and accompaniments of the arthritic trouble. Neuralgias, often mistaken for rheumatism, of the legs, along the spine or across the loins, are frequent forerunners of arthritis rheumatica. Centrally, worry, anxiety, shock—seem to him in some cases to have originated the disease. The most prominent accompaniment of the arthritic mischief is seen in the muscular atrophy which in many cases intervenes, and which develops far too rapidly to be due to mere disuse. Whether this atrophy be primary or secondary, is it reasonable to suppose that it can exist without accompanying degenerative changes in the cord, and is it not fair—from the clinician's view, to assume these changes to be similar to those found in anterior polio-myelitis?

Pathology points to the probable fact that the trophic nerves of the bones and joints are found in the mixed nerve trunk and that they issue along with the motor fibers from the anterior cornua, where they are, like the muscular trophic fibers, connected with a group of large nerve cells. Some connection must exist between these and the brain. Clinically the author has often seen arthritis induced by trauma of the cord or of the peripheral nerves which could not, except by the history of the case, be distinguished from the rheumatoid form. This fact has been known for years. In 1864 Drs. Weir Mitchell, Moorhouse and Keen published their observations on the subject and so far back as 1831, Dr. S. W. Mitchell reported cases where arthritic symptoms supervened upon injury to the spinal cord. These cases were successfully treated by applying a dozen cups and abstracting as many ounces of blood from the neighborhood of the cervical or lumbar enlargements. If the cupping did not afford relief, blisters were applied to the same areas.

Upon the foregoing data it seems not unreasonable to assume that the joint troubles in rheumatoid arthritis are due to spinal congestion or chronic myelitis, chiefly affecting the ganglion cells of the anterior horns but extending also, when the disease is associated with "glossy skin" to the ganglion cells of the posterior horns.

The author cites a number of cases in which blisters, 6 inches by 2½ inches, were applied to either side of the spine, the blistered surface being kept open for a week with savine ointment, daily local massage; arsenic and nitrohydrochloric acid, formed the basis of the treatment and in which marked improvement was the rule. In conclusion he states that in the early stages of rheumatoid arthritis continuous spinal counter irritation is of great value. After the bones have enlarged and the articular cartilages have been destroyed it is of little use. Nevertheless, in these chronic cases where exacerbations of pain and swelling occur, it may be used, often, with distinct and lasting benefit. JELLIFFE.

PATHOLOGY OF HYSTERIA. F. D. Savill (Lancet, 1901, 2, July 20, No. 4,064).

Savill says that the sudden onset of hysterical paralysis (or other malady) suggests a vascular lesion, and the anatomic change is in fact a vascular one—a sudden dilation or contraction of the arterioles of a given area, accompanied in some instances by exudation, or disturbance of nutrition in that part of the nervous system the function of which is deranged. Just as subjects of the hysteric diathesis are liable to attacks of flushing or pallor of the skin, so also, it is believed, are they liable to attacks of flushing and pallor of various parts of the interior of the body. In the absence of experimental proof of the truth of this proposition, Savill directs attention to the clinical features of hysterical syncope, to the evidences of the hysterical diathesis, and to the causes of hysteria as tending to confirm his contentions. He states that the essential lesion in hysterical syncope is to be sought in the abdominal sympathetic, and that this lesion, whatever it may be, gives rise to a rapid dilation of the splanchnic arteries and consequently to cerebral anemia. The hyster-